

A PROCESS FOR THE PREPARATION OF
MOISTURE-CURABLE, POLYETHER URETHANES WITH
TERMINAL CYCLIC UREA/REACTIVE SILANE GROUPS

ABSTRACT OF THE DISCLOSURE

A process for preparing a moisture-curable, polyether urethane containing terminal cyclic urea/reactive silane groups by reacting at an NCO:OH equivalent ratio of 1.5:1 to 2.5:1

- a) a hydroxyl component containing i) a polyether containing two hydroxyl groups and one or more polyether segments, wherein the polyether segments have a number average molecular weight of at least 3000 and a degree of unsaturation of less than 0.04 milliequivalents/g, and ii) a polyether containing one hydroxyl group and one or more polyether segments having a number average molecular weight of 1000 to 15,000, with
- b) an isocyanate component containing i) a compound containing two isocyanate groups, and ii) a compound containing one isocyanate group, and subsequently reacting this reaction product at an equivalent ratio of isocyanate groups to isocyanate-reactive groups of 0.8:1 to 1.1:1 with
- c) a compound containing an aspartate group and a reactive silane group to form an intermediate polyether urethane containing terminal non-cyclic urea/reactive silane groups and converting the non-cyclic urea groups to cyclic urea groups by reacting the intermediate polyether urethane.